

# **Fighting Downtown: A Training Necessity for the Heavy Brigade**

**A Monograph  
by  
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Armor**



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## **ABSTRACT**

### **Fighting downtown: A training necessity for the heavy brigade**

by Major David T. Seigel, USA, 49 pages

This monograph examines current U.S. Army urban operations doctrine and training and their adequacy to prepare the Army's heavy forces to fight in future conflicts. The purpose of this examination is to determine whether the heavy brigades are ready to fight in an urban environment.

This monograph begins by analyzing urbanization trends in world demographics and their impacts on warfare in the future. This monograph also analyzes the lessons learned and impacts of the relatively recent post-Cold War battles of Mogadishu and Grozny to identify the methods that potential adversaries will likely use to counter the United States combat power advantage.

This monograph next analyzes the relevancy of U.S. Army urban operations doctrine and training, focusing primarily at the heavy brigade level. It evaluates heavy brigade doctrine and training by analyzing how well they address full spectrum operations, anticipated threat tactics, light infantry / joint integration, and the use of current equipment and technology.

This monograph concludes that the likelihood of U.S. Army heavy brigades participating in an urban conflict is greatly increasing. It also finds that current urban operations doctrine for heavy forces is inadequate, but that new and relevant doctrine will arrive soon. This monograph also finds that urban operations training for heavy forces is insufficient to prepare the force to fight the next war. Lastly, this monograph concludes with recommendations for improving urban operations doctrine and training.

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## INTRODUCTION

Throughout the history of warfare, armies have fought in and around cities. The battles for Manila, Stalingrad, Aachen, Berlin, and Hue, just to name a few, are demonstrative of the enormous commitment of resources and support required to win the urban fight. More recently, battles were fought in Panama City, Mogadishu, and Grozny. Fortunately for the U.S. Army, in the afterglow of the Cold War, it has not had to fight a significant battle against a determined and well-armed enemy whose domain is urban. Is this pattern likely to continue?

Trends in worldwide demographics indicate that a greater percentage of the world's population lives in urban environments than ever before, with approximately 50% of the world's six billion inhabitants now living in an urban environment. Additionally, the greatest increases in urban population have been in the less developed countries, many of which are of strategic interest to the United States.<sup>1</sup>

History has shown that fighting in an urban environment can be extremely costly in terms of *casualties, supplies, and time*. A vivid example would be the five month German – Soviet struggle in the streets of Stalingrad in 1942, where the casualties numbered in the hundreds of thousands and materiel consumption overwhelmed the German logistics system.<sup>2</sup>

Commanders wisely seek to avoid a potential battle of attrition fought in the tough terrain of the city if possible. However, the next adversary of the United States will likely choose to fight in an urban environment, hoping to minimize technology overmatch and take advantage of the United States' aversion to casualties and strict rules of engagement which seek to minimize collateral damage. The likelihood of the U.S. Army participating in an open desert battle such as it did in Desert Storm is decreasing dramatically --- the next foe will want to counter U.S. forces using asymmetric methods to avoid U.S. strengths. The easiest way to do so is to invite the United States to fight in the cities.

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<sup>1</sup> United Nations Population Fund (UNFPA), "Urbanization and Migration," available at <http://www.unfpa.org/modules/briefkit/English/ch06.html> (29 August 2000).

<sup>2</sup> R. Ernest Dupuy and Trevor N. Dupuy, *Encyclopedia of Military History from 3500 B.C. to the*

The U.S. Army is in the midst of transforming a portion of its force structure so that it has units and formations that possess sufficient firepower, protection, and sustainment capabilities to contribute to major conflicts while also increasing its strategic responsiveness. However, the majority of the combat power will reside in the heavy forces well into the next decade. These heavy forces, primarily consisting of the latest version of Abrams tanks and Bradley Fighting Vehicles, will be an integral part of the ground force required to defeat the next adversary.

The purpose of this monograph is to evaluate current MOUT doctrine and training for the heavy brigades. Given that the next significant battle the U.S. Army fights is likely to be in an urban environment involving both heavy and light forces, this monograph will focus on two major questions: are the heavy brigades ready to fight in a MOUT environment? If they are not, what steps must the U.S. Army take to ensure they are ready to fight in an urban environment?

This monograph will identify the changes in worldwide demographics and analyze how that might affect potential U.S. Army battlefields in the future. Additionally, it will analyze the post-Cold War battles of Mogadishu and Grozny to identify the tactics potential adversaries might employ when confronting the United States.

After analyzing how the changing global demographics and likely threat tactics might impact the U.S. Army tomorrow, this monograph will address how U.S. Army doctrine prepares the heavy brigade to train and fight in the urban environment. The U.S. Army's capstone warfighting manual, *FM 100-5 (Operations)*, states that doctrine "must be definitive enough to guide specific operations, yet remain adaptable enough to address diverse and varied situations worldwide."<sup>3</sup> At lower levels, this means that doctrine must provide the baseline tactics, techniques, and procedures for units to train effectively in peacetime so that they will succeed in wartime. Therefore, this monograph must determine if the doctrine is sufficient enough for an S3 in an armored or mechanized brigade to develop a MOUT training plan?

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*Present* (New York: Harper & Row, Publishers, 1986), 1089.

<sup>3</sup> U.S. Army, *FM 100-5 Operations*, (Washington, DC: Department of the Army, 14 June 1993), 1-1.

Training is the key to combat readiness, whatever the environment. The U.S. Army is extremely busy, and perhaps no echelon more so than at the brigade level. With units regularly deployed to Bosnia, Kosovo, Kuwait, the Sinai, and numerous other countries, the U.S. Army is busier in peacetime than it ever has been before.<sup>4</sup> Abrams and Bradley gunnery, Combat Training Center (CTC) rotation preparations, and even Stability and Support Operations (SASO) are trained regularly at home station and at the combat training centers.

Doctrine should be an inextricable link to training, and should provide the “how” for units to prepare for war or operations other than war. However, if our current doctrine and training are focused on performing military tasks to support conventional operations in open terrain and peacekeeping operations, yet, we believe our most likely venue for combat will be the cities and urban sprawl of the 21<sup>st</sup> Century, how ready will the force be?

In order to determine the readiness of the heavy brigades to conduct operations in an urban environment, this monograph will evaluate heavy brigade doctrine and training using these criteria:

- 1) Full Spectrum Operations: Offense, Defense, Stability, Support
- 2) Anticipated Threat Tactics
- 3) Light Infantry and Joint Integration
- 4) Applicability for Current Equipment and Technology

Most importantly, this monograph will conclude with recommendations for how the U.S. Army can better prepare its heavy brigades to fight in an urban environment.

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<sup>4</sup> GEN Eric K. Shinseki, Chief of Staff of the United States Army, “Army Transformation,” presented to the Airland Subcommittee on Armed Services – United States Senate (8 March 2000), 2.

## CHAPTER 1: Changes in world demographics and threat tactics.... “WHY” the U.S. Army will have to fight in cities

*“Military leaders who believe that future warfare will not encompass this unpleasant environment (urban terrain) are deluding themselves...As urban areas continue to expand, they will increasingly encompass regions of vital interest to the United States.”<sup>5</sup>*

The U.S. Army has long been involved in urban operations. In the last century alone, U.S. forces have fought in cities such as St. Lo, Aachen, Manila, Seoul, Hue, Saigon, Panama City, and Mogadishu. Each of these battles are vivid examples of the complex and exhaustive nature of fighting in the urban environment.<sup>6</sup> Additionally, each of them is an example of why battles fought in cities have been characterized by brutal fighting involving large numbers of soldiers with high casualties.

Recognizing that city fighting can indeed become a “meatgrinder” that quickly consumes units and supplies with frightening efficiency and speed, the U.S. Army’s manual for fighting in urban environments, FM 90-10 Military Operations on Urban Terrain, “stresses that urban combat operations are conducted only when required and that built-up areas are isolated and bypassed rather than risking a costly, time-consuming operation in this difficult environment.”<sup>7</sup>

There is no doubt that it is more advantageous and suitable to isolate and bypass enemy concentrations, perhaps similar to what GEN Douglas MacArthur did to the Japanese during the island hopping campaign in World War II. However, the chances of having a favorable alternative that would allow the U.S. Army to avoid the urban fight in the future is growing much less likely.

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<sup>5</sup> Major General Robert H. Scales, Jr., “The Indirect Approach – How US Military Forces Can Avoid the Pitfalls of Future Urban Warfare.” *Armed Forces Journal International* (October 1998), 71.

<sup>6</sup> David P. Dilegge, “Urban Analysis – A Need at All Levels of Operation and Command and Particularly for Marine Expeditionary Forces.” Marine Corps MOUT homepage, available at <http://www.geocities.com/Pentagon/6453/uaca> (accessed 25 August 2000).

<sup>7</sup> U.S. Army, *FM 90-10, Military Operations on Urbanized Terrain (MOUT)* (Washington, DC: Department of the Army, 1979), 1-1. The Command and General Staff College’s Combined Arms Doctrine Directorate is currently rewriting this manual with significant changes incorporated to make it more useful for 21<sup>st</sup> Century urban operations.



The U.S. Army will not be able to avoid the urban fight in the future for two major reasons: the dramatic increase in worldwide urbanization and the increasing likelihood that the next enemy will choose to oppose the United States in urban terrain in order to counter the technological advantages inherent to the United States military.

According to the latest world population demographic estimates produced by the United Nations, for the first time in history half of the world's population now lives in an urban environment. In only forty years, the world's populations has doubled from approximately three billion to over six billion today.<sup>8</sup> Since the world's land mass hasn't increased, the increase in population is an indication that future wars could be even more likely to be fought in highly populated areas than in the past.

In what is considered the developed world, consisting primarily of North America, Europe, and parts of Asia, close to 75% of the people reside in urban areas. This percentage is increasing slightly, but at a rate that is much slower than it was twenty years ago. Many of the developed countries are undergoing significant urban sprawl outside their large cities, creating an extended metropolitan region outside the main city area. This creates an urban obstacle, in some cases, up to 100 miles in depth!<sup>9</sup> Fortunately, it is very unlikely that the United States will have to fight in an urban environment in Europe or North America in the near future, with the possible exception of the former Yugoslavia. However, this is not the case for the developing world.

Most of the world is in the process of undergoing intense urbanization, much as the United States and Europe did 100 years ago. With better economic opportunities available in the cities of Asia, Africa, and South America, many of their great cities have seen unprecedented population explosion. The world's urban growth rate greatly exceeds that of the rural growth rate

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<sup>8</sup> United Nations Population Fund (UNFPA), "Urbanization and Migration," available at <http://www.unfpa.org/modules/6billion/ccmc/thedayofsixbillion.html> (accessed 29 August 2000).

<sup>9</sup> *World Resources 1996-97 – A Guide to the Global Environment*, "Cities and the Environment," available at [www.wri.org/wri/wr-96-97/index.html](http://www.wri.org/wri/wr-96-97/index.html) (accessed 29 August 2000), 2. An example of urban sprawl used in the World Resources Guide is the tremendous expanse of suburb after suburb in places such as Silicon Valley in California. Another example would be the heavily urbanized regions such as those between Boston and New York, or in the Ruhr region in Germany.

by a margin of four to one. Contemporary estimates predict that in the next twenty-five years two out of three people will reside in cities.<sup>10</sup> As Robert Kaplan aptly points out in his book, The Coming Anarchy, “In light of the fact that 95% of the earth’s population growth will be in the poorest areas of the globe, the question is not whether there will be war (there will be a lot of it) but what kind of war.”<sup>11</sup> As a result, it is increasingly looking more and more like it will be a city fight.

More importantly, the globalization of the world economy has made many of these countries increasingly more important to the national interests of the United States. Likewise, many of these countries or transnational entities have governments which are unstable or unfriendly to the United States. It is not hard to imagine a scenario (e.g. Sierra Leone, Venezuela, etc.) where a conflict might expand to involve the United States could occur in these developing countries. Should that scenario become a reality, it is becoming increasingly more likely that it will be fought on the urban battlefield.

One illustration of the increasing urbanization in developing countries is the growth of cities with over one million inhabitants and the dramatic increase in the number of “mega cities,” which is a description for those cities with a population greater than eight million. As depicted in the Table 1 below, the trend toward massive urban growth in the developing world is significant.

YEAR	“Million Cities” (POP > 1 million)	“Developed World Mega Cities” (POP > 8 million)	“Developing World Mega Cities” (POP > 8 million)
1950	50	2	0
1990	270	5	16
2015	516	36	30

Table 1: Large City Population Trends<sup>12</sup>

<sup>10</sup> *World Resources 1998-99 – A Guide to the Global Environment*, “Urban Growth” (Oxford: Oxford University Press, 1998), 146. The World Resources Institute expects the urban population to increase by 100% between 1990 and 2025, resulting in 5 billion city dwellers in 2025.

<sup>11</sup> Robert Kaplan, *The Coming Anarchy* (New York: Random House, 2000), 45-46.

<sup>12</sup> LTG (RET) Paul K. Van Riper, “A Concept for Future Military Operations on Urban Terrain,” *Marine Corps Gazette* (October 1997), A-1. The column depicting the cities with over 1 million inhabitants came from the World Resources Institute’s *World Resources 1996-97 -- Guide to the Global Environment*, page 2. The figures for the anticipated mega cities in the developed world can be found on

One very glaring example of the urban explosion occurring in many countries is Seoul, South Korea. At the beginning of the Korean War in the June 1950, Seoul had approximately one million inhabitants.<sup>13</sup> As the largest city and the capital of South Korea, Seoul was both extremely valuable to both sides. Had General Douglas MacArthur not conducted the brilliant Inchon envelopment in September 1950 and instead opted for a more conventional attack from the Pusan perimeter to steadily force the North Korean People's Army (NKPA) north, it is highly likely that Seoul would have been the scene of a protracted NKPA defense. As it turned out, the Inchon landings completely unhinged the extended NKPA and forced the bulk of their Army to flee to the northeast rather than fight a deliberate defense of Seoul. However, even with the preponderance of their army in retreat the NKPA still tried to hold Seoul, for it took over two weeks for the United States' 7<sup>th</sup> Infantry Division, 1<sup>st</sup> Marine Division, and the South Korea's 17<sup>th</sup> Regiment to clear the city in heavy fighting.<sup>14</sup>

Although there is hint of a rapprochement on the Korean peninsula these days, currently there are approximately 1,000,000 soldiers within 100 kilometers of the most fortified border (demilitarized zone) in the world, all poised to renew the fighting should the war tocsin sound. Situated only 30 kilometers south of this fortified border, Seoul is within artillery range of NKPA forces. As pointed out by the Secretary of Defense, William Cohen, on 22 September 2000, they "are doing more training today than they did last year. They have more forward deployed artillery pieces than ever before."<sup>15</sup>

However, the Seoul of 1950 is not the Seoul of 2000. The execution of the famed Inchon landing and drive inland in 1950 would be much more difficult due to the dramatic urbanization

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page 146 of the same source. The two cities in 1950 that fit the mega city description were New York and London. By 2015, twenty-three of the thirty-six mega cities will be in Asia.

<sup>13</sup> Russell W. Glenn, *Combat in Hell: A Consideration of Constrained Urban Warfare*, (Santa Monica, CA: RAND, 1996), 4.

<sup>14</sup> T.R. Fehrenbach, *This Kind of War*, (New York: The MacMillan Company, 1963), 251.

<sup>15</sup> Michael Zielenziger, "North Korea Military Stronger," *The Kansas City Star*, 23 September 2000, sec. A, 14.

of the Korean peninsula, especially the megalopolis of Seoul, only thirty miles from Inchon.<sup>16</sup> Seoul's population is now over ten times larger than it was fifty years ago, with close to eleven million citizens.<sup>17</sup> With one out of four South Koreans living in Seoul, there is little doubt that it would be at the center of any conflict involving the two Koreas. The urban sprawl surrounding the city now would make an attempt to avoid fighting in an urban environment in Korea almost impossible.<sup>18</sup>

Seoul is just one obvious example of why the dramatic increase in urbanization will effect warfighting for the foreseeable future. Although battlefields could have been located outside cities in the past (even then they often were not), there is likely not enough open space available to avoid the urban fight today. Worldwide demographic changes have urbanized "key lines of communication, transportation nodes, and road and rail links – will make it difficult in conventional warfare for ground forces to bypass or maneuver around cities as they have traditionally attempted and as warfighting doctrine mostly stresses."<sup>19</sup> In the past it was said all roads lead to Rome. In the future these roads may not lead to Rome, but they will certainly lead to a city of a million people or more.

If one accepts Karl von Clausewitz' definition of center of gravity as the "hub of all power and movement, on which everything depends," it follows that cities will become even more likely to be military objectives in the future. Clausewitz recognized over 150 years ago that the seizure of key cities (usually capitals) were important war aims if they are indeed the hub upon which all else depends.<sup>20</sup> Lieutenant Colonel Robert Hahn, the U.S. Army's Army After Next Urban

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<sup>16</sup> Fehrenbach, T.R., *This Kind of War*, 25.

<sup>17</sup> Seoul Metropolitan Focus, available at [http://www.metro.seoul.kr/eng/overview/index\\_area.html](http://www.metro.seoul.kr/eng/overview/index_area.html) (accessed 22 September 2000). This is a rough estimate and the lowest as well. The World Resources Institute estimates Seoul's population to be closer to twelve million.

<sup>18</sup> *Ibid.*

<sup>19</sup> Jennifer Morrison Taw and Bruce Hoffman, "Operations Other Than War," *New Challenges for Defense Planning: Rethinking How Much Is Enough* (Santa Monica, CA: RAND, 1994), 226.

<sup>20</sup> Karl von Clausewitz, *On War*, trans. and ed. Michael Howard and Peter Paret (Princeton, New Jersey: Princeton University Press 1984), 595-96. Clausewitz identifies two other primary war objectives as well: 1) destruction of the opponent's army (if significant), and 2) attacking the principal ally of the opponent if they are more powerful.

Warfare Director recognizes that many of the military operations in the near future will occur in or near cities:

Cities --- and those connected clusters of cities called conurbations --- increasingly will be the political, economic, social, and cultural epicenters around the world. The control of large urban areas will be critical to the successful accomplishment of strategic, operational, and tactical objectives in future conflicts. Therefore, the U.S. Army must be prepared to engage in wars against competent enemy forces that have decided to conduct operations from within and around large cities.<sup>21</sup>

As the world's population becomes increasingly urbanized, people are becoming more and more dependent on the technological services that only a city can provide. These economic, political, communication, transportation, and social hubs are proving to be the key locations where the United States' foreign policies and, as a result, many of its military operations, are implemented. From Port-Au-Prince to Mogadishu to Brcko to Pristina, soldiers are finding themselves operating in cities more and more often.

Not only are operations being conducted more frequently in cities for the reasons listed above, but they are also frequently (in developing countries) the only locations with the airfield or port capabilities required to support a sizeable force. Almost any significant intervention by United States forces will require the use of an airports and, in most cases, a seaport to facilitate the flow of forces towards their area of operations. Almost without exception these airports and seaports are located in or near major urban areas, especially in the developing countries. A prudent enemy might very well choose to use an "anti-access" strategy by opposing these United States force projection operations before their combat power advantage is lost forever. The bypass of urban areas such as these could very well prove impossible if they are adjacent to or surround the critical airports and seaports required to introduce United States forces.<sup>22</sup>

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<sup>21</sup> LTC Robert F. Hahn II and Bonnie Jezior, "Urban Warfare and the Urban Warfighter of 2025," *Parameters* (Summer 1999), 74.

<sup>22</sup> MAJ Frank R. Boynton, USMC, "Power Projection Operations and Urban Combat: An Avoidable Combination?" (Fort Leavenworth, KS: School of Advanced Military Studies, United States Army

Over two thousand years ago, Sun Tzu offered this advice to future commanders planning a campaign, “The worst policy is to attack cities. Attack cities only when there is no alternative.”<sup>23</sup> Herein lies the rub regarding the interface between warfare and world demographics in the 21<sup>st</sup> Century: all U.S. Army current doctrine, theory, and historical experience says to avoid combat in the cities, yet the likelihood of being able to avoid the urban fight in the next conflict is quickly evaporating. While the words of Sun Tzu may still ring true today, the fact remains that the United States military might not be able to choose the battlefield of its choice in future conflicts.

Although it might not be the case in the future, the United States was quite fortuitous in the Gulf War, for it could not have asked for a better scenario than that which played out during Operations Desert Shield and Desert Storm in 1990-91. With the Cold War just over, the United States Army was trained, manned, and equipped to fight a major regional conflict in the Middle East. Iraq’s passive campaign plan following its seizure of Kuwait in August 1990 was a tremendous miscalculation. Their passivity allowed the United States to mass combat power by air and sea in neighboring Saudi Arabia for over five months prior to the start of the war. In yet another blunder, they allowed the allied coalition to solidify and opted to fight them alone conventionally when war became inevitable. Additionally, the open desert terrain provided a perfect showcase for the United States led coalition to demonstrate to the world their technological superiority. For the United States Army, there couldn’t have been a better match between its capabilities and the mission it was asked to perform. However, that was the last war and the United States can ill afford to rest on its laurels and continue to prepare to fight the next war in the same conditions as it fought the last.

The United States cannot expect to face an incompetent enemy like it did in Gulf War in 1990-91. That war was fought on the world stage thanks to CNN, and was closely watched by all,

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Command and General Staff College -- Monograph, December 1995), 20.

<sup>23</sup> Sun Tzu, *The Art of War*, trans. Samuel B. Griffith, (New York: Oxford University Press, 1963), 78. This statement is made in relation to the other options of offensive strategy, such as disrupting alliances or attacking the enemy army in open terrain.

including our future enemies. As so aptly stated by Martin Van Creveld, “Given an opponent capable of learning, a very real danger exists that an action will not succeed twice because it succeeded once.”<sup>24</sup> There is little doubt anywhere that the United States still maintains a technological advantage over other potential adversaries. A competent foe, however, will seek to minimize this advantage by employing a strategy that can draw a favorable outcome for him.

One of the ways the next enemy can minimize the United States’ maneuver, firepower, and command & control advantage is to choose to fight in an urban area. The enemy who chooses this approach will see the city as a refuge to provide cover and concealment from the long-range precision technologies employed by the United States. The enemy commander will know that he won’t have to decisively defeat his stronger opponent to win, but instead merely avoid losing since time will be on his side. Clausewitz might say his aim would be “negative,” but his strategy will be based on politics and the common perception that the American government and public does not have “the stomach” to accept an extended conflict that results in more than a few casualties. The pullout of United States forces from Lebanon shortly after the Beirut bombings in 1983 and from Somalia not long after Army Rangers fought courageously in the streets of Mogadishu a decade later have reinforced this perception. By choosing to fight in the concrete jungle that describes many cities today, the next enemy leader might conclude that all he has to do is cause enough casualties, U.S. military or noncombatant, to erode the will of the United States to continue the fight.<sup>25</sup>

This leader will not operate under the same political constraints as the American leaders. He would be accepting the risk associated with a strategy of attrition, but would also reason that it is still a better strategy than trying to fight the United States in the open.

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<sup>24</sup>Martin Van Creveld, *Technology and War: From 2000 B.C. to the Present*, (New York: Free Press, 1989), 319.

<sup>25</sup>Russell W. Glenn, *Mars Unmasked: The Changing Face of Urban Operations*, (Santa Monica, CA: RAND, 2000), 2.

To illustrate how a technologically inferior forces are using urban terrain to level the playing field with a more powerful, conventional foe, it is useful to briefly examine the Mogadishu battle between Somali clansmen and U.S. Army infantrymen in October 1993 as well as the battles for Grozny between Chechen rebels and the Russian Army from 1994-1996. Additionally, insight from the more recent Russian recapture of Grozny in 2000 can provide lessons for future U.S. Army operations.

### **Mogadishu, Somalia**

Although the mission began in 1992 as strictly a humanitarian operation to help feed the starving Somalis, clan violence soon interrupted relief shipments enough to cause the United States to send military personnel to provide security. By August 1993 the mission had expanded to include disarming the factions and nation-building. With the introduction of U.S. Army Rangers and other special forces in August, the mission expanded to include the apprehension of many of the clan leaders responsible for attacking Pakistani UN peacekeepers earlier in the summer.<sup>26</sup>

In the aggregate, this operation was a stark example of how a technologically inferior opponent can use the advantages of the urban fight to counter the mobility and firepower advantages of the most powerful military in the world. The Somali forces were not even formally organized, relying instead on methods such as burning tires to rally the militiamen and supporting residents in an attempt to overwhelm the isolated American forces. The heroic Rangers, Delta, and the 10<sup>th</sup> Mountain Division Quick Reaction Force (QRF) killed over 500 Somalis and wounded an additional 1000 while suffering only 18 killed and 73 wounded.<sup>27</sup> However, the tactical victory was at the same time a strategic setback, for soon after the United States began its withdrawal from Somalia.

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<sup>26</sup> Mark Bowden, *Black Hawk Down*, (New York, Atlantic Monthly Press, 1999), 71.

<sup>27</sup> *Ibid*, 333.



There is no doubt that many of the United States' future adversaries paid attention to the success the Somali clansmen had in the corrugated steel jungles of their capital city. Barely two years after the overwhelming victory in the deserts of Iraq and Kuwait, the power of the United States military had been held in check by a third-rate semi-military force using the advantages of urban terrain. The U.S. Army learned valuable lessons from the fighting in Mogadishu. Some key observations regarding urban combat gained from the battle are listed below:

- Rules of Engagement (ROE) can restrict United States technological advantages. For many months prior to the firefight, ROE restrictions prohibited the use of mortars or artillery in order to minimize noncombatant casualties.<sup>28</sup> Additionally, the line between noncombatants and combatants became extremely blurred when women and children willingly acted as a moving screen for Somali gunmen, or openly fired on the shocked Americans. ROE restrictions are a necessary aspect of modern warfare in order to maintain legitimacy, and they are here to stay. Just as a hockey coach must have a plan for playing with less than the full number of players on his team, U.S. forces must learn to train and operate without all of their combat multipliers due to restrictive rules of engagement.

- Urban terrain diminished the United States navigational advantages. The ground rescue force sent to rescue the surrounded soldiers had significant problems getting to the right location, prolonging the ordeal and exposing more soldiers to Somali fire unnecessarily.<sup>29</sup> Unlike the open deserts of the National Training Center or Iraq, navigational aids such as the GPS can be undependable in urban areas. Personal reconnaissance by U.S. soldiers will likely be impossible in the next urban fight, but a detailed map study on current and proper scale maps by all soldiers can help reduce the confusion caused by disorientation.

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<sup>28</sup>W.G. Rosenau, "Every Room is a New Battle: The Lessons of Modern Urban Warfare," *Studies in Conflict and Terrorism*, vol. 20, no. 4, October-December, 1997, 380. Helicopter gunships were not disallowed, however. Mr. Rosenau aptly brings up the point that their earlier indiscriminant use had killed scores of noncombatants and alienated the Mogadishu populace well before the firefight in October.

<sup>29</sup>Bowden, 106.

- The enemy's command and control (C2) apparatus might not be easy to target.

Although the U.S. clearly had a technological advantage, viable Somali nerve centers that could easily be targeted by precision guided munitions (PGM) were almost nonexistent. For example, the U.S. could not use its sophisticated eavesdropping or jamming capabilities effectively since the Somali militiamen relied on word of mouth communication, signals from burning tires, or merely moved to the sound of the guns.<sup>30</sup> As the combat multipliers were stripped away one by one, it is no wonder it soon became a gunfight: the American infantryman versus the Somali clansman.

- Combined arms capabilities are required for urban fighting. It has been widely recognized since the battle in Mogadishu in 1993 that the initial rescue force should have been equipped with armored vehicles from the start. Moving around the battlefield in thin-skinned trucks or on foot needlessly exposed many Americans to withering Somali gunfire. As it turned out, an ad-hoc combined arms force of Pakistani tanks and Malaysian armored personnel carriers (manned by U.S. soldiers) finally rescued the beleaguered and surrounded raiding party.<sup>31</sup>

The unconventional forces commanded by Mohammed Farah Aideed were not highly trained, well equipped with sophisticated weapons, or enabled with a complex communications system. However, because they were able to use the advantages offered by their hometown, the urban maze they knew so well, they were able to decisively engage American forces and cause enough casualties to gain a strategic victory.

Perhaps insurgent forces were paying heed to the success of the Somali militiamen around the world, for it was only about fifteen months later when another underdog would apply a similar strategy to find success against a much stronger and technologically advanced adversary in a place called Chechnya.

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<sup>30</sup>Rosenau, 381.

<sup>31</sup>Bowden, 269. The Malaysian APCs were driven by their own soldiers, but were otherwise manned by the U.S. 10<sup>th</sup> Mountain Division soldiers.

## **Grozny, Chechnya**

The “battle lab” for urban warfare has been located in the Chechen capital of Grozny for most of the last decade. Russia’s war with its breakaway republic, Chechnya, serves as yet another example to the rest of the world of how an loosely-organized insurgent force can successfully fight a much more powerful opponent by using the advantages inherent to the urban fight.

Since the initial Russian attack on Grozny on 31 December 1994, the city has changed hands four times. After applying many of the lessons they had previously chosen to forget since they were the masters of MOUT in World War II, the Russians successfully retook Grozny in early 2000 and currently retain control of the city.<sup>32</sup> To pursue a significant discussion of the history of the wars in and around Grozny is not pertinent to the purposes of this monograph. However, a synopsis of the applicable lessons learned about the urban fight is addressed below:

- Flexible implementation of combined arms tactics is a must. In the initial Russian attack in first few days of January 1995, Russian armored vehicles assaulted into Grozny without dismounted infantry support to clear the “defiles” – the city streets and urban canyons that are ever present in cities. This resulted in disaster for the Russians, with over 100 out of 120 vehicles destroyed in just one brigade.<sup>33</sup> It is the opposite side of the coin that American forces experienced in Mogadishu fifteen months prior when the infantry needed the protection and firepower an armored vehicle could provide. The Russians realized, at great cost, how important and yet vulnerable dismounted infantrymen truly were in the urban fight. It is an adage that has withstood the test of time: the city fight is best fought by mounted and dismounted warriors. In the 2000 Grozny campaign, the Russians indiscriminant use of artillery and air delivered bombs pulverized most of the city, setting the stage for the successful seizure of the city by the infantry

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<sup>32</sup> Timothy L. Thomas, “Grozny 2000: Urban Combat Lessons Learned,” *Military Review* (July-August 2000), 50.

<sup>33</sup> Glenn, *Mars Unmasked: The Changing Face of Urban Operations*, 24.

teams supported by armor.<sup>34</sup> Although the “pound them into submission” technique is probably the easiest and safest method for a conventional power not concerned about casualties, it is not likely to be a viable option for the U.S. military — there will almost certainly be stringent restrictions on the use of force.

- Isolating the city is a necessity. In the first Chechen war, the Russians failed to completely isolate Grozny, enabling the Chechen rebels to resupply and reinforce their forces in the city from the outside at will. In 2000, the Russians demonstrated that they were a learning organization by ensuring that they encircled the city completely, ensuring that the Chechen rebels would soon die on the vine like an unpicked grape.

- Thorough Intelligence Preparation of the Battlefield (IPB) is crucial to success. The Russians were not prepared to fight the Chechens in January 1995. Much to their chagrin, the Russians underestimated how well the rebels were armed, their will to fight, their tactics, and their own logistical requirements. Similarly, their underestimation of the need for intelligence gathering sources such as satellites, unmanned aerial vehicles (UAV), and scouts in the city itself proved to be a monumental error. These mistakes were not repeated in 2000 when they retook the city. For example, Russian planners and commanders thoroughly analyzed the cities’ design to include the critical public utilities. They also inserted approximately 250 specially trained snipers into the city to kill Chechen riflemen and, more importantly, provide timely intelligence to the commanders.<sup>35</sup>

- In order to win the city fight in wartime, it requires training for it in peacetime. Although, at one time, the Russians were quite competent at fighting in cities, their performance was less than satisfactory in the fighting in Grozny from 1994-1996. Their soldiers not only

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<sup>34</sup>Thomas, 54.

<sup>35</sup>Ibid, 51.

received little or no training on urban warfare prior to experiencing it, they were not trained adequately for even basic military operations.<sup>36</sup>

### **Summary**

World demographics have irrevocably changed the world's terrain and potential battlefields to the degree that overlooking the requirement to be ready to fight in a city is almost criminal. As illustrated by the recent conflicts in Somalia and Chechnya, potential adversaries are choosing urban terrain to level the playing field against a more powerful foe. If future conflicts involving the U.S. military will involve city fighting, it must train for it now. However, prior to training, a comprehensive and easily understood doctrine must be the precursor for effective training.

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<sup>36</sup>Glenn, *Mars Unmasked: The Changing Face of Urban Operations*, 32.

## **CHAPTER 2: The heavy brigade in the urban battlefield – would it likely be used in urban terrain and does U.S. Army doctrine adequately guide its operations?**

*“Doctrine is one means by which military strategy is translated into operational guidance, and it also serves to drive training as well as influence acquisition decisions and organizational design.”<sup>37</sup>*

This chapter will address the issue of the likelihood that a heavy brigade would be involved in urban operations, a domain that many think of as primarily a light infantryman’s battleground. Additionally, this chapter will examine current U.S. Army doctrine at the brigade level to determine its adequacy to meet the current and anticipated future needs of the heavy brigades using the following evaluation criteria:

- 1) Full spectrum operations: offense, defense, stability, support
- 2) Anticipated threat tactics
- 3) Light infantry and joint integration
- 4) Applicability for current equipment and technology

In order to provide its nation greater strategic flexibility and responsiveness, the U.S. Army has begun a transformation of its combat forces. In general terms, the U.S. Army consists of a legacy force of four light infantry divisions, five heavy mechanized divisions, and a division forward positioned in Korea with a combination of both light and heavy forces. Although this legacy force is extremely capable and recognized as the finest in the world, the lack of a medium-weight force limits U.S. Army capabilities. The light infantry divisions are strategically mobile but lack the firepower and protection to survive against a determined and effective enemy. The heavy divisions have the firepower and protection, but their sheer size and weight might not enable them to get to the battlefield in time or with enough combat power to be decisive.<sup>38</sup>

In order to address these shortfalls, the “Army’s Transformation Strategy will result in an Objective Force that is more responsive, deployable, agile, versatile, lethal, survivable, and

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<sup>37</sup>Russell W. Glenn, *Fox Trot: Seeking Preparedness for Military Urban Operations*, Armed Forces Journal International (May, 1999), 46.

<sup>38</sup>GEN Eric K. Shinseki, Chief of Staff of the United States Army, “Army Transformation,” presented to the Airland Subcommittee on Armed Services – United States Senate (8 March 2000), 6.

sustainable than the present force.”<sup>39</sup> Although the U.S. Army is converting some light infantry brigades and heavy brigades into interim brigades in order to bridge the gap between light and heavy forces in the immediate future, the objective force is still over a decade away.<sup>40</sup> This objective force will combine the mobility of the light forces with the lethality and survivability of the heavy forces. The only problem is that the technological nirvana that combines the lethality and protection of an M1A2 tank with the weight of an M113 Armored Personnel Carrier has not yet arrived!

What this means to the U.S. Army is that for the foreseeable future light and heavy forces will still make up the core of the combat forces committed. As previously discussed, these forces will most likely have to be ready to operate in an urban environment. The U.S. Army will likely fight this next urban battle using a combination of light and heavy forces.

History has proven that the urban fight has a greater chance of success when a combination of light infantry and heavy forces are used together. Just as the United States sorely regretted not having heavy forces integrated into their operations in Mogadishu in 1993, the Russians also learned that heavy forces cannot attack without infantry support in Grozny barely a year later. The synergy gained by the symbiotic relationship between heavy and light forces has been proven time and again in urban operations.

Depending on the mission at hand, the commander will tailor the available assets to get the right mix. If the mission involves something similar to that faced in Somalia in 1993, perhaps only a mechanized company/team or task force would suffice. However, if the mission involves combat in cities such as Bogota, Baghdad, Kuwait City, Manila, Taipei, or Seoul, where entire light infantry divisions could be deployed, it is a safe bet that the time-phased force and

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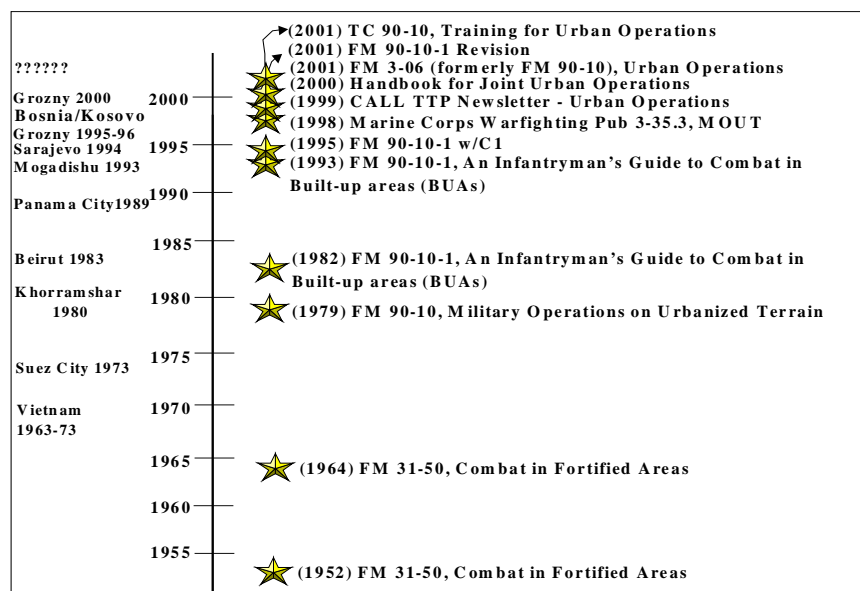
<sup>39</sup>Ibid.

<sup>40</sup>Ibid, 8. General Shinseki further challenged the science and technology community to harness their energy toward developing an all encompassing recommendation by 2003. When the technological capabilities are realized, the legacy force will then transform into the objective force, which could take an additional decade.

deployment list (TPFDL) will include a heavy brigade, if not more than one. Using the contemporary examples of the Russian experience in Grozny and the United States' experience in Mogadishu, it is clear that the combined arms team is still the method of choice for fighting in the city.

Fortunately for the U.S. Army, many key leaders and champions for MOUT awareness such as RAND's Russell W. Glenn seem to have effectively brought the urban fight into the spotlight. Likewise, Training and Doctrine Command (TRADOC) has significantly improved the level of awareness on urban operations issues affecting doctrine and training. Even with the greater emphasis on urban operations, it will take several years to implement the necessary improvements. Well written doctrine leads to effective training. Effective training leads to victory in combat with minimal loss of life.

Between 1952 and 1993, the U.S. Army only produced four major urban operations manuals, but since 1993 it has or soon will publish seven manuals or other publications designed to educate its soldiers about the intricacies of fighting in cities. This positive trend in doctrine production is depicted in the graphical representation below.<sup>41</sup>



<sup>41</sup> A similar graphic was used by MG John LeMoyne, Infantry School Commandant, during his presentation given at the Military Operations in an Urban Environment Symposium, Fort Knox, Kentucky, on 15 September 2000. It represents the increased awareness of the need for better MOUT doctrine.



Perhaps the single greatest impact on improving the status of the U.S. Army's MOUT doctrine and training capabilities was the creation of the Combined Arms MOUT Task Force (CAMTF) in January 1999. CAMTF has the charter to serve as the U.S. Army's hub for urban operations training and doctrine at the brigade level and below. By identifying the doctrinal changes and training requirements necessary for combined arms operations at the brigade level and below, they are quickly filling a critical gap in the U.S. Army's warfighting capabilities. The CAMTF has developed a doctrinal working group that is updating urban operations doctrine for all the battlefield operating systems in conjunction with CAC's proponent schools.<sup>42</sup>

In recognition of the need for revised doctrine and training, studies relating to the conduct of urban operations have rightly been at the forefront in the infantry and armor communities in the during the last two years. As recently as 15 September 2000 a Military Operations in an Urban Environment Symposium was held at Ft. Knox in which the Infantry and Armor School's reiterated the need for a continued focus on urban operations. Both schools emphasized the necessity of light forces providing the preponderance of the manpower but highlighted the absolute necessity of including heavy forces and the rest of the combined arms team in support.<sup>43</sup>

In order to determine how well existing heavy brigade doctrine addresses urban operations, this study will concentrate on the primary manuals available to a heavy brigade commander and staff. Specifically, this doctrinal study will focus on FM 90-10, Military Operations on Urbanized Terrain and FM 71-3, The Armored and Mechanized Infantry Brigade.<sup>44</sup> FM 90-10

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<sup>42</sup>Combined Arms MOUT Task Force (CAMTF) overview briefing, available at <http://call.army.mil/call/mout/camtf> (accessed 25 August 2000).

<sup>43</sup>MG John LeMoyne, Infantry School Commandant, presentation given at the Military Operations in an Urban Environment Symposium, Fort Knox, Kentucky, on 15 September 2000.

<sup>44</sup>An analysis of FM 71-123, Tactics and Techniques for Combined Arms Heavy Forces: Armored Brigade, Battalion/Task Force, and Company/Team and FM 90-10-1, An Infantryman's Guide to Combat in Built-up Areas could be possible but will not be for the purposes of this study. In the case of the former, it does not specifically address urban operations although it does address light/heavy integration and their use in restrictive terrain. In the case of the latter, it is an extremely well-written and useful manual for battalion level and below, and focuses primarily on light infantry operations. For further review of these two manuals, see Major Curtis A. Lapham's School of Advanced Military Studies monograph entitled "Colossus on Main Street: Tactical Considerations of Heavy Armor and Future MOUT Doctrine," December 1996.

should provide sufficient background information on urban operations to supplement the primary heavy brigade warfighting manual, FM 71-3. Through the use of the evaluation criteria listed at the beginning of this chapter, an accurate estimation of the current status of U.S. Army MOUT doctrine can be made. A brief description of each of the evaluation criterion follows.

**Full spectrum operations** consist of all types of military operations that today's U.S. Army units must be ready to execute when called upon. These operations are all encompassing and include offensive and defensive operations as well as stability and support operations.<sup>45</sup> In a large urban area, it is entirely possible that portions of each type of operation could be ongoing simultaneously. It is not unreasonable, for example, for a heavy brigade to conduct more than one of these types of operations at the same time. Not only must doctrine address the different types of operations, it must also address how those operations differ in the various types of urban terrain. For example, the urban sprawl found outside Seoul is much different than the corrugated steel structures found in Mogadishu. This study will address how well heavy brigade doctrine addresses full spectrum operations in urban areas.

As described in the vignettes about Mogadishu and Grozny in Chapter 1, **threat tactics** include the use of asymmetric approaches to offset the numerical and technological advantages of a conventional power such as the U.S. The next foe will likely seek to "exploit constraints placed on U.S. forces due to cultural bias, media presence, ROE, and distance from the crisis location."<sup>46</sup> Potential threat forces in an urban environment could include unconventional forces, paramilitary forces, militia or special police units, or organized crime elements in addition to or in lieu of

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<sup>45</sup>U.S. Army, FM 3-0 (DRAG), Operations (Washington, DC: Department of the Army, 15 June 2000), 1-15. FM 3-0 goes into greater detail describing full spectrum operations and further defines the four types of primary operations listed above.

<sup>46</sup>U.S. Army, FM 7-30 (Final Draft), The Infantry Brigade (Washington, DC: Department of the Army, 5 September 2000), J-5. This new version includes a 36 page appendix on urban operations that provides an outstanding framework for the brigade commander and staff to reference.

conventional forces. The U.S. Army can expect the next foe to adhere to the following tenets in the next urban war:<sup>47</sup>

- Use the population to an advantage - by providing concealment and deception for their actions as well as an intelligence source.

- Win the information war – in the age of instant internet access, cell phones, and readily available international news media sources, threat forces will attempt to use the information element of combat power to their advantage.

- Manipulate key facilities – threat forces will likely try to control key infrastructure sites such as telephone exchanges, power generation centers, and media stations.

- Use all dimensions – threat forces will use all dimensions of the urban jungle, including sewers and rooftops.

- Employ urban-oriented weapons – threat forces will attempt to stockpile and use weapons that are especially effective in urban areas, such as RPGs, mines and booby-traps, grenade launchers, incendiary weapons, mortars, and snipers.

- Engage the entire force – threat forces will likely attempt to stay close to U.S. forces to avoid precision firepower from U.S. artillery and close air support. They will also attempt to induce stress on U.S. soldiers by conducting continuous operations throughout the depth of the battlefield. There will be no safe haven.

- Focus attacks on service support and unprotected soldiers – the next foe will likely attempt to avoid initially fighting U.S. combat forces and instead opt to interdict less protected sites such as a resupply facility or convoy route.

If there is one axiom that has remained true throughout modern military history regarding urban operations it is the necessity of maximizing the advantages of the combined arms fight. For any doctrine concerning urban operations to be truly useful, it must adequately discuss **heavy/light and joint integration** as a cornerstone of the manual. Recent lessons learned from

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<sup>47</sup>Ibid, J-6 – J-8.

Mogadishu and Grozny prove the U.S. Army cannot afford parochialism among its branches in the urban fight. Detailed discussion of the integration of heavy and light forces in urban operations is a prerequisite for effective combined arms training in peacetime exercises. Furthermore, it must begin now.

The U.S. Army will never again fight by itself, nor should it ever want to. It is not hard to imagine an ongoing urban operation that included a light infantry division with operational control of a mechanized brigade, while receiving electronic and close air support from the air force, flank security from Marine Expeditionary Unit (MEU) near a harbor, and reinforcing fires from naval vessels offshore. The tint of purple that permeates today's operations is a tremendous combat multiplier that urban operations doctrine must address.

In today's world where computers and supporting technologies become obsolete within eighteen months, doctrine must be **applicable to the current equipment and technology** existing in the units as they go in harm's way against a determined and lethal adversary. Very often, the full effects of many combat systems may be negated by the effects of urban terrain. Examples include artillery limitations due to munitions effects or trajectories as well as FM communications and GPS limitations in the concrete jungle.<sup>48</sup> While it is difficult for doctrine to *lead* technology, it is essential that it be flexible enough to encompass it, adapt to it, and make up for its shortcomings.

#### **FM 90-10, Military Operations in Urbanized Terrain (1979)**

The latest version of FM 90-10 was last published in 1979 at the height of the Cold War when house to house fighting in the towns and cities of West Germany was a distinct possibility. Theoretically, FM 90-10 should be the bedrock urban operations manual that the Army's branches should use to shape their branch specific field manuals.<sup>49</sup> However, so much has changed strategically, tactically, and technologically since 1979 that it is incredulous to believe

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<sup>48</sup>Russell W. Glenn, *Marching Under Darkening Skies: The American Military and the Impending Urban Operations Threat*, (Santa Monica, CA: RAND, 1998), 15.

<sup>49</sup>*Ibid*, 9.

that the U.S. Army has gone this long with antiquated doctrine in its capstone urban operations manual. Perhaps it was well-written for its time, but its sun passed beyond the horizon for good in November 1989. Many of today's soldiers were not even born when it was published! But alas, the sound of the war tocsins have been heard in the distance, for by early 2001 an all encompassing FM 3-06, Urban Operations, the replacement for FM 90-10, should be in the hands of leaders throughout the U.S. Army. Regardless, if the U.S. Army went to war tomorrow it would still have the 1979 version as its primary urban operations manual.

### **Urban Operations Doctrine and Full Spectrum Operations**

FM 90-10 adequately covers offensive and defensive operations by describing a special situation (nested scenarios) for each level of command from corps down to battalion level for both offensive and defensive operations. This format is sufficient, but only *for European operations against a Soviet threat*. There is no discussion of fighting in third world cities against an asymmetric threat --- one can safely assume the 1979 version of FM 90-10 was not often referenced in the command posts of U.S. Army units in Somalia in the late summer of 1993.

The manual's coverage of stability operations and support operations is cursory at best. Stability operations are those actions that enhance U.S. national interests by influencing the military, civil, and diplomatic realms. Support operations largely consist of assisting civil authorities in responding to the humanitarian crisis.<sup>50</sup> FM 90-10 does include one page each on dealing with noncombatants, civil affairs operations, and refugee control, none of which is covered in adequate detail. One must assume that, with the very real possibility of World War III erupting at any time, these issues were not the primary matter at hand. However, in the age of today's instantaneous worldwide television and internet media coverage these issues have a much greater relevance.

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<sup>50</sup>U.S. Army, FM 3-0 (DRAG), 1-15.

### **Urban Operations Doctrine and Anticipated Threat Tactics**

FM 90-10 adequately covers the anticipated threat tactics in both offensive and defensive situations, but once again only concerning a monolithic Soviet threat in a high intensity conflict. An example would be how a motorized rifle division would conduct a surprise attack from the approach march against a defending U.S. force in an urban environment. It takes some imagination to come up with a scenario today where those conditions might be met. Additionally, there is no mention of the asymmetric possibility of tomorrow's urban fight.

### **Urban Operations Doctrine and Light/Heavy and Joint Integration**

FM 90-10 highlights the need to fight as a combined arms team in urban areas. However, it is completely focused on the heavy fight and does not mention how light infantry forces could effectively be introduced into the fight. It does cover the use of mounted forces in urban combat with dismounted support, but only with the amount of dismounted support that is organic to a mechanized infantry organizations. Heavy/light integration is not addressed at levels above platoon level for light infantry units, which provides no help for today's realities. FM 90-10 is strictly an army manual and only briefly covers the capabilities and recommended employment of tactical air support.

### **Urban Operations Doctrine and Current Technology and Equipment**

Applicability for current equipment and technology is the final evaluation criteria and, for obvious reasons, the outdated FM 90-10 does not make the cut and warrants no further emphasis. For the reasons previously mentioned, the existing FM 90-10 is insufficient for urban warfare in the dawn of the 21<sup>st</sup> Century.

The U.S. Army can look forward to the imminent release of FM 3-06, Urban Operations. From analyzing the final draft version of this manual, it appears to make up for the inadequacies of its predecessor in today's battlefield. Throughout the manual, it uses the operational framework of assess, shape, dominate, and transition for the commander to develop his plan. FM 3-06 (Final Draft) covers in detail the full spectrum of operations to include an entire chapter on

stability and support operations. It is also up to date with modern threat asymmetric tactics to include lessons learned from Mogadishu, the Balkans, and Chechnya. This new manual also addresses the issues and capabilities of joint and multinational contributions to the urban fight, as well as how current equipment and technology impact it.<sup>51</sup>

### **FM 71-3, The Armored and Mechanized Infantry Brigade (1996)**

FM 71-3 was last published in 1996 and thus provides much more relevant information than the 1979 edition of FM 90-10. FM 71-3 focuses on the employment of heavy brigades across the range of operations described in the 1993 edition of FM 100-5, Operations. It is an all encompassing manual for the brigade commander and his staff to plan and conduct operations.

### **Urban Operations Doctrine and Full Spectrum Operations**

FM 71-3 has detailed chapters on both offensive and defensive operations. However, neither specifically address the implications of conducting operations in an urban environment.

Although the urban setting is often thought of as simply a different type of terrain, the second and third order effects caused by conducting operations in this environment invite a much more than cursory mention in the primary brigade warfighting manual.

Stability operations are addressed in a thirteen page annex that addresses how a brigade can promote a stable environment in their area of operations through peacekeeping or peace enforcement activities, but there is minimal coverage of the ramifications of conducting stability operations in cities.

### **Urban Operations Doctrine and Anticipated Threat Tactics**

FM 71-3 recognizes that the Cold War is history and that potential threats can use a wide variety of tactics to counter U.S. forces. It emphasizes that regional threats are much less predictable and would require a very thorough intelligence preparation of the battlefield (IPB) by the brigade commander and his staff. However, it does not mention the increasing likelihood of

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<sup>51</sup> U.S. Army, FM 3-06 (Final Draft), Urban Operations. This document is being produced by CAC's Combined Arms Doctrine Directorate (CADD) at Ft. Leavenworth, Kansas.

the threat using urban terrain. Once again, it does not delve into the asymmetric possibilities of the next urban fight.

### **Urban Operations Doctrine and Light/Heavy and Joint Integration**

FM 71-3 has one appendix that addresses joint and multinational integration and another that addresses armored operations with light infantry and special operations forces. Although the former does not address specific urban warfare issues specifically, the latter provides detailed guidance and recommendations for the use of an armored brigade with an attached light infantry battalion as well as armored brigade operations when attached to a light infantry division. It does discuss operations in urban terrain, although a more detailed analysis would have been an improvement.

### **Urban Operations Doctrine and Current Technology and Equipment**

FM 71-3 does have an appendix on the digitized heavy brigade that addresses the capabilities of the systems and organizations inherent to it, while also recommending tactical implementation. Although much of the equipment described would be of use in the urban fight, there is no mention of the effects urban terrain has on the sophisticated technology organic to the digitized brigade.

For the reasons listed above, the current version of FM 71-3 does not adequately address urban operations. Perhaps had FM 90-10 been rewritten with today's strategic, operational, and tactical realities in mind shortly after the end of the Cold War, the current version of FM 71-3 would have included much more information on how the heavy brigade could best fight in cities.

### **Summary**

Neither FM 90-10 nor FM 71-3 adequately sets the stage for the heavy brigade to conduct urban combat in 21<sup>st</sup> Century. They do not emphasize the need to conduct actions to gain information superiority over the enemy. Additionally, neither manual provides direction for how to conduct operations using non-lethal weapons or under restrictive rules of engagement which partially or fully prevent the use of some of the greatest combat multipliers, such as attack



helicopters, artillery, or close air support. Finally, both manuals fail to emphasize the importance of logistical resupply and casualty evacuation. Based on the United States' aversion to casualties, the U.S. Army must ensure that its doctrine and training support casualty evacuation operations and the protection of its highly vulnerable logistics tail in the urban environment.

The current editions of FM 90-10 and FM 71-3 fail to address the importance of urban warfare. Although each address to varying degrees the aspects of full spectrum operations, anticipated threat tactics, integration of light/heavy and joint forces, and current technology, they are not covered in sufficient detail to facilitate the heavy brigade commander and staff. Fortunately for the heavy brigades of the U.S. Army, a new and revised FM 71-3 is already out in final draft edition including an urban operations appendix written specifically to compliment FM 3-06.

### **CHAPTER 3: The heavy brigade urban operations training plan: where “hope we don’t have to do that in the next war” is the defacto course of action.**

*“Training is intimately related to doctrine. Without sufficient doctrine, service wide training lacks a basis for commonality in tactics, techniques, procedures and standards.”<sup>52</sup>*

The heavy brigades focus their training efforts on preparing for their next combat training center (CTC) rotation, either at the National Training Center (NTC) at Fort Irwin, California, or the Combat Maneuver Training Center (CMTC) at Hohenfels, Germany. These rotations are the premier training event for those brigades and the training focus for their parent division.

Most experts would agree that the finest training facility for mechanized and armor forces in the world can be found at NTC. This huge training area supports brigade-sized force on force operations against a resident and well-trained opposing force (OPFOR) as well as the largest live-fire area in the United States. Located in the Mojave Desert, it proved to be the ideal training area in preparation for Operation Desert Storm, with most officers and NCOs having at least one rotation under their belt by 1990.

The maneuver area at CMTC is made up of typical German terrain, consisting of heavily wooded areas interspersed with open fields connected by numerous unimproved roads. Although its physical characteristics are much different than that found at NTC and perhaps have more in common with the close terrain found in cities, its lack of size make it insufficient to conduct brigade level operations.

Traditionally, these CTCs have and always will be the graduate level exercise upon which the heavy brigades focus the preponderance of their training efforts on at home station. The majority of the Army’s heavy forces reside in the United States and thus rotate through NTC. It is no surprise that with precious training time and resources to get ready for the all-important exercise in the desert, these heavy brigades train at home those missions that they will execute during the rotation, such as hasty attack, defend, movement to contact, and deliberate attack, *all in open*

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<sup>52</sup> Glenn, *Marching Under Darkening Skies: The American Military and the Impending Urban Operations Threat*, 13.

*desert conditions*. Unfortunately, those missions and conditions *are* what is needed to fight Desert Storm II: The Sequel. However, they *are not* what is needed to fight Mogadishu II: Son of Grozny.

The evolution of the U.S. Army CTC training strategy evolved to this heavy, open combat model over the last two decades. First and foremost, the primary reason is because of the traditional focus on high intensity combat versus a Soviet model. Second, the success in Operation Desert Storm against Iraq, which used Soviet equipment and tactics, further reinforced this training methodology. We continue to refine what we knew we could do. Finally, the necessity to prepare for two major theater wars (MTW), one of which was expected to be in the Middle East, has driven the U.S Army to prepare for open desert combat.

The U.S. Army's heavy forces have a tremendous reputation and are without peer throughout the world in generating combat power. Demonstrations of this power occurred on the world stage in the Gulf War and slightly more than five years later when the heavy force kept the ashes of the 1991-95 Balkan War from rekindling. With the threat of another war in the Middle East always possible and no end in sight to peacekeeping duties in the Balkans, these two major military actions have greatly influenced the training strategy for most of the heavy force.

The dedication of heavy forces to conduct peacekeeping operations has become a common occurrence for heavy forces in the last five years. Even if the mission requires only one heavy brigade from a division to conduct the peacekeeping rotation, it usually takes another brigade to train and evaluate them and then perhaps go themselves only six months later. With only three heavy divisions in CONUS and two in USAREUR, the peacekeeping missions in Kosovo and Bosnia affect a significant portion of the heavy force at any given time. Although some of the tasks required for peacekeeping operations are similar to those in urban warfare operations, they become largely insufficient the closer the operation comes to high intensity conflict.<sup>53</sup>

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<sup>53</sup>For further information on the training similarities between urban operations and peacekeeping operations, see Major Michael E. Hamlet's "Military Operations on Urban Terrain (MOUT), The Key to Training Combat Forces For The Twenty-First Century," School of Advanced Military Studies

If the U.S. Army is to train effectively for the next war, it must ask the question: What kind of terrain and environmental conditions will dominate the next conflict? Based on the previously cited evidence, all current indications suggest an urban fight. Therefore, heavy units must adjust their training strategies to include urban operations training at levels above company/team. In order to force that change of focus, the U.S. Army needs to incorporate an urban operations scenario into at least one mission of its CTC rotations, which will in turn cause the change of focus at home station as well.

As discussed in chapter two, urban operations doctrine must be sufficient enough to enable the heavy brigade staff to properly develop a plan to conduct operations in an urban environment. Doctrine might indeed drive the vehicle called training, but that vehicle runs on two types of fuel: *time and resources*. Regarding training time, there is very little time available for the heavy brigade (or even battalion) to train together. Even when not involved in the train-up for or execution of a peacekeeping operation, heavy brigades are busy with gunnery requirements, post taskings, and the need to become competent at company level and below. The reality of today's time constraints have frequently caused maneuver training at higher levels such as brigade to be largely non-existent unless executed during a train-up for a CTC rotation. Just as a football team practices those plays during the week that it plans on running in the game, the brigade only has the time available to practice what they will execute at the CTCs.<sup>54</sup>

The U.S. Army must look to the future and prioritize the types of missions its heavy brigades must master. As depicted graphically below, the amount of time spent on training for high intensity combat has decreased proportionally since the end of the Cold War, and understandably

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Monograph, 1998.

<sup>54</sup>The three ground maneuver CTCs are the National Training Center at Ft. Irwin, California, the Joint Readiness Training Center at Ft. Polk, Louisiana, and the Combat Maneuver Training Center at Hohenfels, Germany.

so.<sup>55</sup> However, the time spent on training for high intensity combat must include more urban operations training.

Training for High Intensity Conflicts (HIC)	Other
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### **Cold War Model**

Training for HIC (open terrain)	Other (PKO)
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### **Current Model**

Training for HIC (open terrain)	Training for HIC (urban terrain)	Other (PKO)
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### **Recommended Model**

## **Heavy Brigade Training Model**

The heavy forces have focused on the high end of HIC in desert conditions while also spending a considerable amount of time training for and conducting peacekeeping operations. The U.S. Army has not made the time to train the heavy forces to fight as a brigade in urban areas. It is no secret that training time is precious and will require commander's to give up some other elements of their training programs in order to conduct more urban operations training. However, this trade-off will pay huge dividends in the next war. It is time for a paradigm shift in the amount of time spent training for operations conducted in an urban environment.

Just as time is a valuable quantity to commanders, so are his resources. The urban operations facilities existing at NTC and CMTC are inadequate to prepare the U.S. Army heavy brigades to fight the next conflict. The U.S. Army has recognized that fighting in urban terrain is becoming an increasing likelihood, but the money required to properly fund it is not available to fix the problem immediately. With other competing and very deserving demands such as the

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<sup>55</sup>LTC William Miller, Advanced Operational Art Studies Fellowship (AOASF) student, interview by author, 30 November 2000.

transformation campaign, pay increases, quality of life improvements, and normal operations, it will take many years to develop the facilities required for what we need *today*. Initial estimates predict that it will cost approximately \$500 million to create or upgrade the existing urban training complexes at the installations throughout the U.S. Army. Given competing demands for the same dollars, it cannot be finished within one POM cycle. Current estimates anticipate facility completion around 2009.<sup>56</sup>

Change sometimes does not occur quickly in the U.S. Army, but there have definitely been some positive indications that urban operations are increasingly coming to the forefront in the combined arms training strategies of today's units. Perhaps the most significant influence in raising the urban operations level of awareness has been the U.S. Army Infantry School's Combined Arms MOUT Task Force (CAMTF). CAMTF bases its combined arms training strategy on "revised urban operations doctrine, lessons learned from JRTC MOUT Focused Rotation Report, the MOUT-Advanced Concept Technology Demonstration, and the Army Transformation Urban Franchise exploration of future operations."<sup>57</sup>

CAMTF has identified three individual and small unit collective training facilities that are currently in use or scheduled to be built in the next few years. Urban Assault Courses (UAC) and shoot/breach facilities train the small unit collective skills prior to advancing to company/team level or higher. The Combined Arms Collective Training Facility (CACTF) is a significant improvement over most of the existing MOUT sites and is designed to train company/team through brigade level. CAMTF has identified the need for common baseline characteristics for each CACTF, such as the requirement for 20-26 buildings in a three square kilometer city area, tunnel/sewer system, shanty town similar to those found in many less developed countries,

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<sup>56</sup>Combined Arms MOUT Task Force (CAMTF) Study Group Resource Requirements and Training Strategy Final Draft (Appendix 4 to Tab B, Funding Courses of Action), B-4-1.

<sup>57</sup>Combined Arms MOUT Task Force (CAMTF) Executive Summary to Resource Requirements and Training Strategy Report, A-2.

industrial area, electricity, targetry, city dump, breachable walls, and video capable AAR facility just to name a few.<sup>58</sup>

The CTC collective training facilities are expected to consist of over 36 buildings and consist of multiple sites capable of force on force and live fire exercises.<sup>59</sup> The Joint Readiness Training Center (JRTC) at Ft. Polk possesses the only urban operations training facility that realistically supports light infantry brigade-sized operations similar to that recommended by CAMTF.<sup>60</sup> JRTC's focus is primarily on light infantry operations, but usually includes armor/mech company teams as part of the light brigade in rotation.

CMTC has several small mock German villages that are good for company/team level operations. The largest of these, Ubungsdorf, can even support battalion/task force operations. However, CMTC is inadequate for combined arms training for the heavy brigades forward positioned in Europe because of its lack of size. For that matter, brigade level maneuver or live training for the two divisions in Germany rarely happens due to lack of adequate maneuver training areas and maneuver rights agreements with the German government.

The urban operations training facilities at NTC are currently woefully inadequate. Consisting of a several four to six building villages spread throughout the vast training center, it is impossible for a heavy brigade to truly conduct any realistic urban operations training. Fortunately, there are proposals that call for the construction of a large urban training complex at NTC that will support up to heavy brigade level operations.<sup>61</sup> However, the parched desert floor has not yet been broken by the shovels of the ground-breaking ceremony, so time will tell if it will be in use prior to the next war or even built at all.

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<sup>58</sup>Combined Arms MOUT Task Force (CAMTF) Study Group Resource Requirements and Training Strategy Final Draft (Urban Training Facilities Design Requirements, Appendix 5 to Tab B), B-5-2.

<sup>59</sup>Combined Arms MOUT Task Force (CAMTF) overview briefing, slide 17, available at <http://call.army.mil/call/mout/camtf> (accessed 25 August 2000).

<sup>60</sup>Combined Arms MOUT Task Force (CAMTF) Study Group Resource Requirements and Training Strategy Final Draft (Urban Operations Facility Packages), Appendix 2 to Tab B), B-2-2.

<sup>61</sup>Major Ken Royalty, National Training Center G3 Plans and Operations, phone interview by author, 13 November 2000.

As part of their focus on urban operations doctrine and training, CAMTF is developing a training circular, TC 90-1, Training for Urban Operations. It is designed as a training support package for leaders to effectively train urban operations over the full spectrum of Army operations. Although it is only in draft version now and concentrates on training units below brigade level, TC 90-1 “focuses on the four primary home station urban operations training facilities – urban assault course, shoot house, breach facility, and combined arms collective training facility.”<sup>62</sup> Furthermore, it provides leaders at all levels a framework from within which they can plan for, prepare for, and execute urban operations.

To effectively prepare for the next war, the U.S. Army must train in a variety of conditions, one of which is in urban terrain. In order to properly evaluate how well the heavy brigades conduct urban operations training, this monograph will use the criteria listed below:

- 1) Full spectrum operations: offense, defense, stability, support
- 2) Anticipated threat tactics
- 3) Light infantry and joint integration
- 4) Applicability for current equipment and technology

### **Urban Operations Training and Full Spectrum Operations**

In order to conduct full spectrum operations during times of war, the U.S. Army must train for them in peacetime under conditions closely replicating those of combat to increase unit proficiency. Although the heavy brigade and its subordinate units regularly train for offensive and defensive operations, rarely if ever do they train on them in an urban setting. In preparation for a peacekeeping operation, heavy brigades regularly train on stability operations tasks, but generally only after they already know they will conduct the operation. Should the next notification be one for war in urban terrain, there will likely be little time for a train-up.

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<sup>62</sup>U.S. Army, TC 90-1, Training for Urban Operations (draft) (Washington, DC: Department of the Army, 1 September 2000), iii.



### **Urban Operations Training and Anticipated Threat Tactics**

Through the efforts of the Center for Army Lessons Learned (CALL), CAMTF, RAND's Russ Glenn, and many leaders in the U.S. Army, the anticipated threat tactics are known throughout most of the light forces. These threat tactics are incorporated into OPFOR operations at JRTC and are therefore better known throughout the light forces. However, with only a heavy company/team OPCON to the light brigade during the rotation, the majority of the heavy forces have not seen firsthand how an asymmetric threat might fight in an urban area.

With NTC currently unable to support realistic urban operations and almost all of the homestation training focusing on gunnery, NTC preparation, or peacekeeping, most heavy brigades are only able to address anticipated urban threat tactics through officer professional development program sessions or during training at company/team level or below at homestation urban training facilities.<sup>63</sup> That level of training is inadequate to prepare for the urban conflicts that await the U.S. Army.

### **Urban Operations Training and Light/Heavy and Joint Integration**

As discussed previously, JRTC rotations regularly include light/heavy integration that includes fighting in and around their urban training sites. Although NTC rotations also often include heavy brigades with an additional light infantry battalion which facilitates a better understanding of each other's capabilities, the lack of a significant urban operations training facility restricts the overall training potential.

### **Urban Operations Training and Current Technology and Equipment**

U.S. Army heavy forces are not getting a good look at how their equipment performs in an urban environment. The use of equipment and enablers such as the Multiple Launch Rocket System (MLRS), unmanned aerial vehicles (UAVs), hand-held GPS devices, and FM radio communications in a large city could be greatly different than it is at homestation or at a CTC.

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<sup>63</sup>The author contacted a number of operations officers in various heavy brigades throughout the U.S. Army. Although the conclusions that urban operations training is not often being conducted by heavy brigades was anticipated, the author assured non-attribution.

### **Summary**

The heavy brigades are busier than they ever have been before. Training for gunnery, peacekeeping operations, and CTC rotations leave little time for other kinds of training. The CTC rotation schedule drives the training strategy in preparation for the rotation. Since the urban operations facilities at NTC are virtually nonexistent and therefore not heavily integrated into the missions, the heavy brigades do not spend a large amount of time and resources at homestation on urban fighting. Fortunately, changes for the better are on the way, but it will take close to another decade to complete the facilities at homestation and the CTCs in accordance with *today's* requirements. Let's hope the next war, which will likely be fought in an urban environment, waits until the U.S. Army is ready.

## CHAPTER 4: Conclusions and Recommendations

In the last few years, more and more of the U.S. Army's leaders have become aware of the increasing likelihood of fighting in urban conditions during the next war. This has led to a significant increase in the development of new urban operations doctrine and plans for training sites. These improvements are welcome throughout the force and will most likely improve effectiveness and save lives in the next war, but they fall short from fully implementing a U.S. Army doctrine and training strategy that adequately addresses fighting in an urban environment. This chapter will address ways that the U.S. Army should improve its doctrine and training for the employment of its heavy forces to conduct urban operations.

### **Doctrine Recommendations**

The increased awareness of the pending urban fight has accordingly led to a greater emphasis on improving urban warfighting doctrine. In the next year, the U.S. Army is scheduled to publish the long awaited capstone manual for fighting in cities, FM 3-06, Urban Operations. Concurrently, the field should receive a host of other updated manuals that will provide doctrinal guidance for brigade operations, such as FM 71-3, The Armored and Mechanized Infantry Brigade, FM 7-30, The Infantry Brigade, and FM 90-10-1, An Infantryman's Guide to Combat in Built-up Areas.<sup>64</sup> These new manuals will likely provide the impetus for increased urban operations awareness and training events. Listed below are recommendations for continuing the improvement on urban operations doctrine in the future.

1) ALL branch specific doctrine should address the implications of conducting their operations in urban areas. This should occur not only because of the increasing likelihood of having to fight in urban areas, but also because combat in cities is so dramatically different, more complex, and resource intensive than combat in any other type of terrain.

2) Urban operations doctrine must emphasize information warfare. Because of the

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<sup>64</sup>Combined Arms MOUT Task Force (CAMTF) Status of Doctrinal Publications (Appendix 1 to Tab F, Doctrinal Update Report), F-1-1.

complex nature of combat in the city, achieving information dominance over the enemy is essential for victory.<sup>65</sup> The rapid identification, assessment, and transmission of enemy action in the city is crucial if the U.S. Army is to fight outnumbered and win while incurring minimal casualties. Information becomes more important than ever before.

3) Urban operations doctrine must emphasize the use of non-lethal weapons and how to operate under varying degrees of ROE restrictions.<sup>66</sup> The wars that the United States might find itself involved in will almost certainly be something well short of total war, such as was fought at Stalingrad or Aachen in World War II. On the contrary, in order to maintain the moral high ground, U.S. forces will conduct operations under restrictive ROE that will necessitate the need for the use of weapon systems that minimize combatant and noncombatant casualties and infrastructure damage.

4) Urban operations doctrine must address how best to use fixed wing close air support, attack helicopters, and artillery in the close terrain of urban areas. These combat multipliers provide a distinct advantage to United States forces over potential adversaries, but the necessity of minimizing noncombatant casualties and collateral damage could limit their use.

5) Doctrine must address how best to conduct logistical resupply and casualty evacuation to a force such as a heavy brigade conducting operations in an urban, noncontiguous environment.<sup>67</sup> The concrete canyons found in many cities greatly exacerbate these critical combat service support functions. As stated earlier, existing urban operations doctrine largely ignores these critical life sustaining combat service support (CSS) functions. The U.S. Army should anticipate and prepare to face a foe that will try to attack the vulnerable logistics tail and thin-skinned vehicles.

6) Doctrine must be flexible and detailed enough to address conducting operations in

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<sup>65</sup>Robert F. Hahn II and Bonnie Jezior, "Urban Warfare and the Urban Warfighter of 2025." *Parameters*, (Summer 1999), 83.

<sup>66</sup>Ibid.

<sup>67</sup>Ibid.

different types of urban terrain: from a shanty town like parts of Mogadishu to a modern metropolis like Seoul.<sup>68</sup> Not only must the doctrine address fighting in a downtown area with tall buildings and underground sewers and or subways, but it must also apply to the outlying urban sprawl that is now commonplace throughout the world.

7) Doctrine must address urban operations across the full spectrum of operations: offense, defense, stability, and support. Although urban terrain is just one type of terrain in which these operations occur, it requires far more coordination and prior planning in order to succeed. The U.S. Army cannot afford to have its doctrine address urban operations as an afterthought or not at all. Furthermore, the U.S. Army must clearly and overtly link existing doctrine for urban operations with its long range training strategy.

### **Training Recommendations**

Since it appears that first round of new urban operations doctrine will soon be in the hands of commanders and staffs throughout the U.S. Army, it is now time to change the training focus for heavy brigades to include a greater emphasis on operations in and around urban areas. As discussed in chapter three, there are significant and welcome additions planned for urban operations training facilities, but these changes will take too long to implement due to lack of sufficient funding. The urban fight is coming and it is now time to make the hard decisions so that American soldiers are ready to fight in cities when called upon. Listed below are recommendations for how the U.S. Army can improve its urban operations training.

1) The U.S. Army should build an instrumented urban operations training complex at NTC that can support an attacking heavy brigade (-) against a resident OPFOR using asymmetric tactics similar to those the next foe will likely use. This facility should be built adjacent to a key maneuver corridor, forcing the training unit commander to address it.<sup>69</sup> This facility will

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<sup>68</sup>Captain Charles Black, USMC, "MOUT Discussion Topics." Marine Corps MOUT homepage, available at <http://www.geocities.com/Pentagon/6453/issues> (accessed 25 August 2000).

<sup>69</sup>Major Ken Royalty, National Training Center G3 Plans and Operations, phone interview by author, 13 November 2000.

exponentially improve the effectiveness and usefulness of the integration of light infantry and heavy forces at NTC.

2) The homestation training plan for the heavy brigades should shift to include a much greater emphasis on conducting full spectrum operations in urban areas. The creation of an urban operations training complex at NTC will greatly facilitate this paradigm shift in training focus in preparation for an NTC rotation. The construction of the Combined Arms Collective Training Facilities (CACTF) recommended by CAMTF is necessary to meet this requirement.

3) The U.S. Army should expand and fully instrument the existing urban training facilities at CMTC to serve the divisions forward deployed in Germany in order to increase their ability to conduct operations in urban areas. These divisions represent a significant amount of the U.S. Army's combat power and deserve state of the art training sites as much as stateside units.

4) The U.S. Army must allocate enough money to significantly improve urban operations training in the near future. If funded, it will take approximately \$630 million to build the homestation urban operations training facilities at the active duty posts and the combat training centers *by FY09*.<sup>70</sup> Although there are obviously competing demands for precious training dollars, the timeline should be reevaluated so that the construction is completed by FY05. It is entirely possible and perhaps likely that the United States will be in a conflict involving the city fight before FY09. Shifting dollars within a POM cycle is not easy and will not come without cost to other programs, but the payoff would be immeasurable.

5) In addition to building urban operations training facilities at homestation and the CTCs, the U.S. Army must fully develop and integrate the latest virtual and constructive urban operations simulations possible.<sup>71</sup> The technology now exists for a brigade staff to fight a constructive

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<sup>70</sup>Combined Arms MOUT Task Force (CAMTF) Study Group Resource Requirements and Training Strategy Final Draft (Resource Requirements Report, (Tab B), B-1.

<sup>71</sup>According to the Training Exercises and Military Operations (TEMO), constructive simulations uses computer driven models to exercise command and staff functions and has been in use by the Army in simulations such as JANUS. Virtual simulations involves soldiers actually operating simulated vehicles and weapons and making decisions in combat that are similar to those in actual combat.

simulated battle while their subordinate battalions execute their orders and fight the battle from in a virtual environment.

The U.S. Army's National Simulations Center at Ft. Leavenworth, Kansas is on the cutting edge of harnessing the full potential simulations can provide units training for combat. The Army's new One Semi-Automated Force (ONESAF) is a constructive simulation that has the *potential* to support urban operations training and is interoperable with virtual training systems such as the Close Combat Tactical Trainer (CCTT), which is regularly used by heavy forces throughout the U.S. Army. The U.S. Army should seek to further develop urban operations simulations training capabilities.<sup>72</sup>

6) Heavy forces gunnery training ranges should include mock urban terrain to better simulate the type of conditions that armor and infantry fighting vehicle (IFVs) crewman might fight in during wartime. This would be especially beneficial during section or platoon gunnery, as well as part of a Combined Arms Live-Fire Exercise (CALFEX) that includes tanks, IFVs, and dismounted infantry.

7) Because of the need to establish a more comprehensive, intellectual approach to urban operations, TRADOC needs to further integrate urban warfare into the curriculum of its schools, such as the Command and General Staff Officer's Course. It is already doing so in some of its courses, such as in the Pre-Command Course (PCC), CAC's School for Command Preparation at Ft. Leavenworth, Kansas. They conduct an exercise for all incoming brigade and battalion commanders that addresses urban warfare issues across the full spectrum of operations. Packaged in a series of scenarios and vignettes, the soon-to-be commanders conduct a tactical exercise

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<sup>72</sup>Dan Wakeman, National Simulations Center, phone interview with author on 14 November 2000. For further information on the National Simulations Center or the capabilities of ONESAF and CCTT, access [www.leavenworth.army.mil/nsc](http://www.leavenworth.army.mil/nsc). ONESAF will replace the JANUS and BBS systems currently used by the U.S. Army. Current databases exist for terrain such as NTC, Ft. Hood, Central Germany, and Kosovo, but unfortunately *none of these databases replicate an urban environment*. Initial estimates indicate that it would take \$1 million (+) to build a database of an existing urban terrain (e.g. Seoul) that could train higher level staffs and operators.

without troops (TEWT) in Lawrence, Kansas that focuses on the discussing the best techniques for conducting offensive, defensive, stability, and support operations in that city.<sup>73</sup>

8) Units should conduct TEWTs, OPD sessions, and rehearsals in cities near their post or use unused buildings on post to conduct training exercises.<sup>74</sup> Although using tanks and IFVs is not always feasible, using wheeled vehicles or walking would still be beneficial. A well planned media campaign in a nearby city prior to an exercise could highlight the need to conduct urban operations training with the local population and alleviate any fears they might have about the purpose of the exercise, not to mention provide valuable public affairs training.

### **Conclusion**

*“...the US military cannot allow itself to be deceived. Future urban operations will not be limited to stability operations against lightly armed paramilitary forces. We will fight real wars against real enemies in real cities. We must be prepared to fight and win these wars with the same level of effectiveness that we expect to achieve when we are engaging a large enemy armored force arrayed in rows across the desert sands.”<sup>75</sup>*

The citizens of the United States have developed an increasing expectation for their military to conduct nearly flawless wartime operations with minimal casualties. Since the Berlin Wall was torn down in 1989, three out of four conflicts involving the United States were overwhelming victories with negligible casualties. Operation Just Cause in Panama, Operation Desert Storm in Iraq and Kuwait, and the recent Operation Allied Force in Kosovo fit this category. The lone exception, Operation Restore Hope in Somalia, ended soon after eighteen of the *best trained and elite* U.S. soldiers were killed in the corrugated steel jungle of the Somali capital, Mogadishu. In order to even come close to the increasing expectation of few U.S. casualties in any conflict, the U.S. Army must be ready to fight in all types of terrain, even in cities.

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<sup>73</sup> Major Frank James, School of Command Preparation (SCP), Ft. Leavenworth, Kansas. The author was able to observe the TEWT in Lawrence, Kansas on 6 September 2000.

<sup>74</sup> Russell W. Glenn, *Combat in Hell: A Consideration of Constrained Urban Warfare*, (Santa Monica, CA: RAND, 1996), 25.

<sup>75</sup> Robert F. Hahn II and Bonnie Jezior, “Urban Warfare and the Urban Warfighter of 2025.” *Parameters*, (Summer 1999), 85.



The current status of U.S. Army urban operations doctrine is bleak but improving at an extraordinary pace. U.S. Army leaders, recognizing the increasing likelihood of fighting the next war in a city or something close to it, have recently placed well-needed emphasis on updating or creating new urban operations doctrine.

The heavy forces of the U.S. Army possess the great majority of the combat power of the U.S. Army and would almost unquestionably participate in any combat operation against a competent and well-armed foe. The next enemy, being familiar with Mogadishu and Grozny, will likely want to use the advantages of an asymmetric urban defense against a conventional attacking force. Both Mogadishu and Grozny highlight the need for the use of a combination of heavy forces and light forces in urban operations.

Although it is highly likely that heavy forces will be involved in urban combat, they are not conducting training to prepare for it. With the creation of an urban operations training complexes at NTC and at homestation, the heavy brigades will rapidly adjust their training strategies to include urban operations. Additionally, the use of constructive and virtual urban operations simulations can greatly improve the combat effectiveness of today's heavy forces.

With the success of the Gulf War, reinforced by operations in Panama and Kosovo, Americans have come to expect near perfection from their military. The United States cannot afford to overlook the necessity of being ready to fight in urban terrain – it is only a matter of time before the U.S. Army is put to the test. If the U.S. Army is going to be perfect in the future urban fight, it is time to start studying.

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